

Claims:

1-23. (canceled)

24. (currently amended) A dynamic magnet system, comprising:

a support structure, and
an even number of magnets oriented in polar
5 opposition to individually move relative to said support
structure along a common axis,
said support structure providing an
unobstructed magnet movement path between said magnets,
a conductor oriented with respect to said
10 support structure and magnets so that movement of said
magnets induces an electrical signal in said conductor,
and
an operating system powered by said signal.

25. (original) The dynamic magnet system of claim
24, further comprising a pair of end magnets along said
axis limiting the travel of said moving magnets, said end
magnets oriented in polar opposition to the nearest
5 respective moving magnets.

26. (canceled)

27. (currently amended) The dynamic magnet system of
claim ~~26~~ 24, said conductor comprising at least one coil
wound on said support structure, said support structure
being nonconductive.

28. (canceled)

29. (original) The dynamic magnet system of claim 24, said support structure orienting said magnets for movement in a primarily horizontal direction.

30. (currently amended) The A dynamic magnet system ~~of claim 24~~, further comprising:

a support structure,
an even number of magnets oriented in polar
5 opposition to individually move relative to said support
structure along a common axis,
said support structure providing an
unobstructed magnet movement path between said magnets,
and

10 ultra low friction bearings establishing static
coefficients of friction between said magnets and said
support structure less than about 0.02.

31. (original) The dynamic magnet system of claim 30, said bearings comprising a ferrofluid.

32. (original) The dynamic magnet system of claim 31, said ferrofluid having a viscosity less than 10 centipoise.

33. (original) The dynamic magnet system of claim 31, said ferrofluid comprising a light mineral oil medium mixed with isoparaffinic acid.

34. (currently amended) The A dynamic magnet system ~~of claim 24~~, comprising:

a support structure, and
an even number of magnets oriented in polar
5 opposition to individually move relative to said support
structure along a common axis,
said support structure providing an
unobstructed magnet movement path between said magnets,

said magnets having multiple oscillation modes
10 relative to said support structure.

35. (currently amended) The A dynamic magnet system
of ~~claim 24~~, comprising:

a support structure, and
an even number of magnets oriented in polar
5 opposition to individually move relative to said support
structure along a common axis,

said support structure providing an
unobstructed magnet movement path between said magnets,
10 wherein said system has a critical angle of
displacement for said magnets from a horizontal static
position of less than 1 degree.

36. (canceled)

37. (currently amended) The dynamic magnet system of
claim ~~36~~ 24, said magnets having multiple oscillation
modes relative to said support structure.

38. (currently amended) The dynamic magnet system of
claim ~~36~~ 24, ~~said bearings~~ further comprising a
ferrofluid bearings between said magnets and said support
structure.

39. (Original) The dynamic magnet systems of claim
38, said ferrofluid having a viscosity less than 10
centipoise.

40. (original) The dynamic magnet system of claim
38, said ferrofluid comprising a light mineral oil medium
mixed with isoparaffinic acid.

41. (currently amended) The dynamic magnet system of
claim ~~36~~ 30, further comprising a conductor oriented with

respect to said support structure and magnets so that movement of said magnets induces an electrical signal in said conductor.

42. (original) The dynamic magnet system of claim 41, said conductor comprising at least one coil wound on said support structure, said support structure being nonconductive.

43. (original) The dynamic magnet systems of claim 41, further comprising an operating system powered by said signal.

44. (currently amended) The dynamic magnet system of claim ~~36~~ 30, further comprising a pair of end magnets limiting the travel of said moving magnets, said end magnets oriented in polar opposition to the nearest
5 respective moving magnets.

45. (currently amended) ~~A~~ The dynamic magnet system of claim 34, ~~comprising:~~
 ~~a support structure, and~~
 ~~a plurality of magnets oriented in polar~~
5 ~~opposition to move relative to said support structure,~~
 ~~said support structure orienting said magnets~~
 ~~for primarily horizontal movement and providing an~~
 ~~unobstructed magnet movement path between said magnets,~~
 wherein said system has a critical angle of
10 displacement for said magnets from a horizontal static position of less than 1 degree.

46. (original) The dynamic magnet system of claim 45, wherein said critical angle is less than 10 minutes.

47. (canceled)

48. (currently amended) The dynamic magnet system of claim ~~45~~ 34, further comprising a conductor oriented with respect to said support structure and magnets so that movement of said magnets induces an electrical signal in
5 said conductor.

49. (original) The dynamic magnet system of claim 48, further comprising an operating system powered by said signal.

50. (canceled)

51. (currently amended) The dynamic magnet system of claim ~~50~~ 34, further comprising ~~respective~~ ferrofluid bearings ~~establishing static coefficients of friction~~ between said magnets and said support structure ~~less than~~
5 ~~about 0.02~~.

52. (canceled)

53. (currently amended) The dynamic magnet system of claim ~~52~~ 51, said ferrofluid having a viscosity less than 10 centipoise.

54. (currently amended) The dynamic magnet system of claim ~~52~~ 51, said ferrofluid comprising a light mineral oil medium mixed with isoparaffinic acid.

55. (currently amended) The dynamic magnet system of claim ~~50~~ 34, said support structure orienting said magnets for movement in a primarily horizontal direction.

56. (currently amended) The dynamic magnet system of claim ~~50~~ 35, further comprising a conductor oriented with respect to said support structure and magnets so that

movement of said magnets induces an electrical current in
5 said conductor.

57. (original) The dynamic magnet systems of claim 56, said conductor comprising at least one coil wound on said support structure, said support structure being nonconductive.

58. (original) The dynamic magnet system of claim 56, further comprising an operating system powered by said current.

59. (currently amended) The dynamic magnet system of claim ~~50~~ 30, wherein said system has a critical angle of displacement for said magnets from a horizontal static position of less than 1 degree.

60. (original) The dynamic magnet system of claim 59, wherein said critical angle is less than 10 minutes.

61-65. (canceled)